

INSLEY

CONCRETE
PLACING
EQUIPMENT

OLD



INSLEY

Concrete Placing Equipment

MAST HOIST PLANTS

STEEL TOWER PLANTS

WOOD TOWER PLANT EQUIPMENT

SPECIAL INSTALLATIONS

CONCRETE CHUTES

* * *

FLOOR HOPPERS

ROCKER DUMP HAND CARTS

CONTROLLABLE CENTER DUMP CONCRETE BUCKETS

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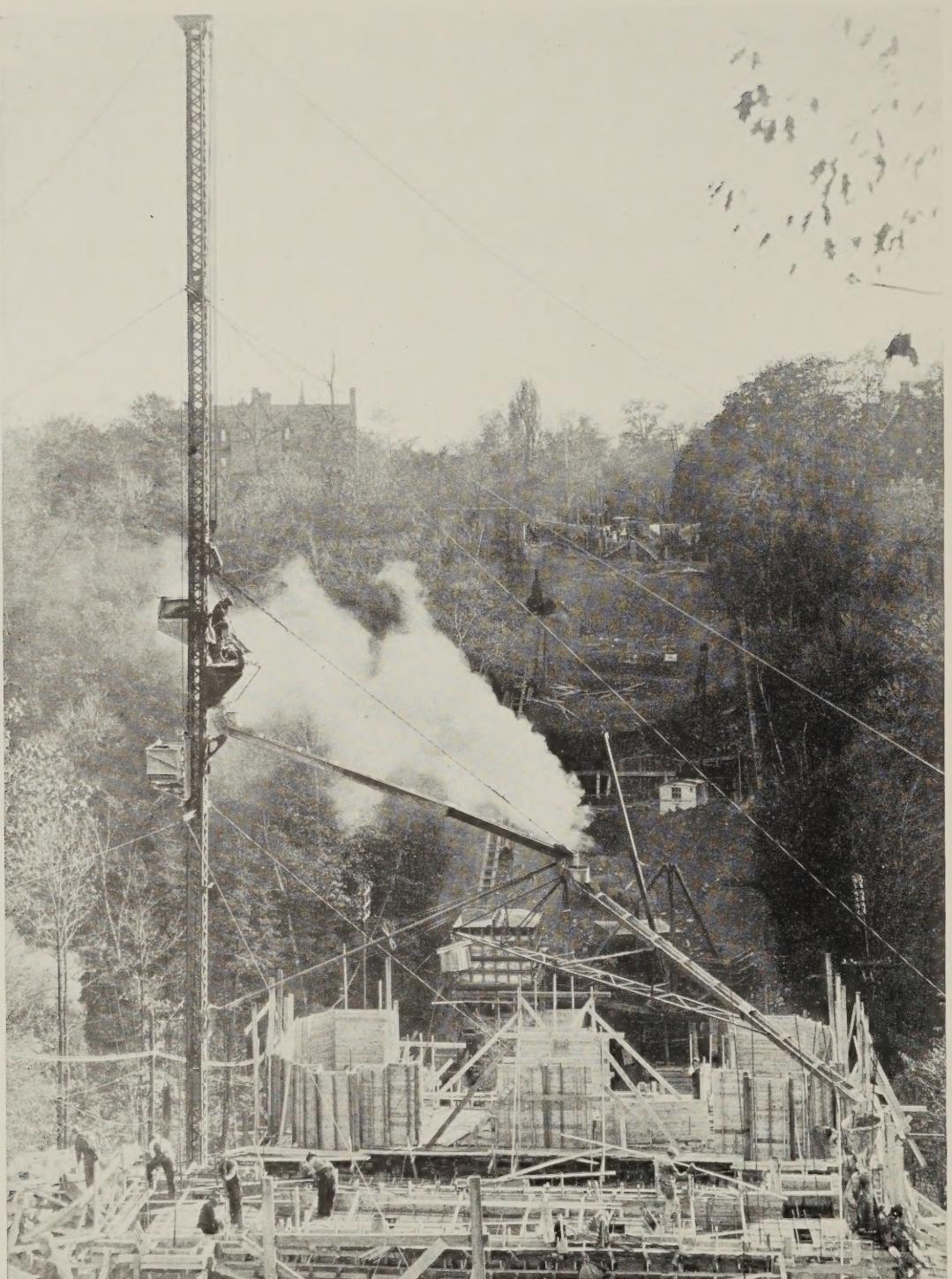
BUILDERS TOWERS



Catalog No. 122

INSLEY MANUFACTURING CORPORATION
INDIANAPOLIS, INDIANA

Industrial Engineers and Manufacturers



A typical Heavy Mast Hoist Plant installation with 40-foot Boom Chute and 40-foot Counter-weight Chute distributing the concrete for a bridge pier.

THE INSLEY MAST HOIST PLANT in its various sizes is serviceable for a wide range of work.

The Placing of Concrete

IT WILL be accepted without argument that the permanence of any concrete structure depends primarily upon the initial quality of the concrete and not upon the machinery which may have been used in placing it in the forms. Concrete which is properly proportioned and thoroughly mixed will leave the mixer as a plastic mass with all of the aggregates held in suspension. Granted that good concrete is received from the mixer, any one of several methods of distribution can be depended upon to deliver it at the point of deposit in as good a physical condition as it was received.

Insley Buckets and Derricks placed the concrete in the Wilson Dam at Muscle Shoals on the Tennessee River many years ago and Insley Cars and Buckets more recently carried and placed the concrete for the Norris Dam on the T.V.A. project.

The concrete for the Arlington Bridge at Washington and for the Huey P. Long Bridge in New Orleans was placed by Insley Chutes from a Tower on a Barge Plant. The concrete for the George Washington Bridge in New York was placed with Insley Chutes. The "Concrete Central", a battery of sixty-nine grain bins with thin walls was built twenty years ago at Buffalo with Insley Towers and Chutes. The Conowingo Dam and Safe Harbour Dam on the Susquehanna River were placed with an Insley Plant on a traveling gantry. The Exchequer Dam at the entrance to the Yosemite used an Insley Tower 475 feet high carrying two two-yard buckets. These are typical of thousands of other permanent and important works throughout the world with millions of yards of concrete which testify abundantly for the adaptability and economy of the Insley Concrete Gravity Plant as a conveyor of well-mixed concrete. The expression "*well-mixed concrete*" is used here advisedly for the reason that

sloppy, improperly proportioned and inadequately mixed concrete which can be readily conveyed by other methods cannot be handled successfully in a gravity plant. There is no better test of the physical quality of a batch of concrete than to start it sliding down a chute.

Buckets, Cars, Carts, Chutes and Tower Plants will all handle concrete with equally satisfactory structural results, but under any given situation some one or a combination from among these various methods will be the more economical in plant and operating costs and in some cases the economy will be outstanding. The problem of method of distribution is the ever present one of choosing the most economical plant after setting down the items of plant investment and operating cost. On many jobs it will be found that the Insley Mast Hoist Plant will place the concrete with savings of as much as 50 per cent in both time and labor cost as against other available methods and the plant investment will be negligible.

This catalog sets out in detail some of the later developments of the Mast Hoist Plant by which it has been made adaptable to a wider range of work, from the smaller job using a 10-S mixer to work of considerable proportions for which a much more expensive plant has generally been heretofore required. The catalog shows also various types of Tower Plants, including the Insley Builders Tower, together with Hoppers, Rocker Dump Hand Carts and Controllable Center Dump Concrete Buckets, each of which has its particular place on the construction job.

Insley engineers offered to the contractor his first Controllable Center-Dump Concrete Bucket; the first practical Concrete Gravity Plant; the first Mast Hoist Plant. Insley likewise offers to the contractor herein the latest improvements in these various items of plant equipment for the efficient and economical placing of his concrete.

INSLEY MAST HOIST PLANTS

12 Cu. Ft. Mast Hoist Plant

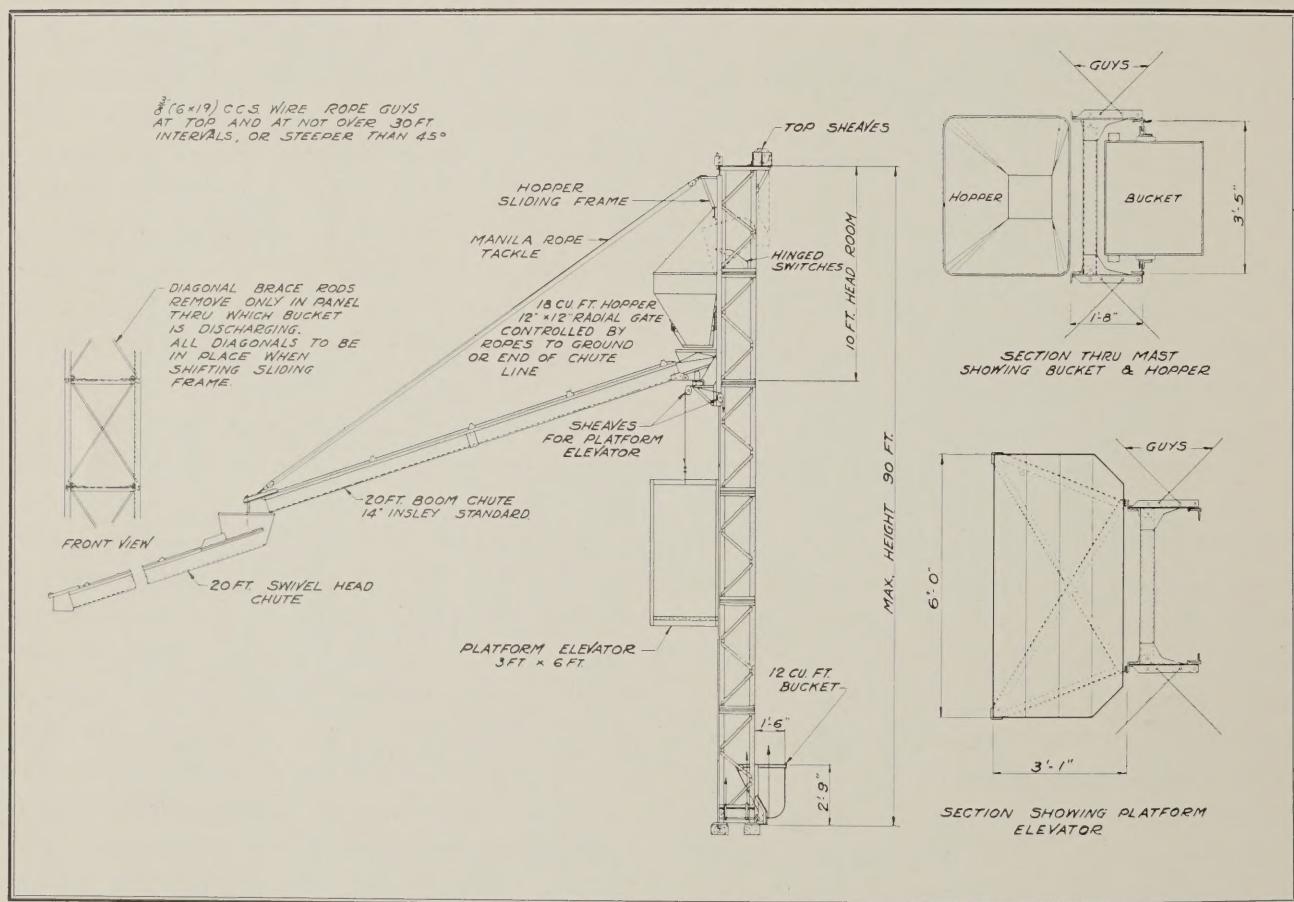
The Insley 12 cubic foot Mast Hoist Plant is designed for use with a 10-S mixer for bridges, overhead crossings, buildings and concrete structures generally. The 20-foot boom chute which is carried from the mast, together with the 20-foot swivel head chute extension, provides for distribution of the concrete within a 40-foot radius from the mast.

The Mast is built of steel angles, of open-back cross section, designed to produce adequate strength with minimum weight and for ease in erection. Mast sections are in five-foot units and are shipped knocked down to facilitate erection by hand. The heaviest

two-fifths the reach of the chutes for a slope of 2 to 5 where chutes are used. The mast should be guyed at the top and at points not over 30 feet apart.

The 12 cubic foot Mast Hoist Bucket rides on hardened steel guides on the inside of the open-back mast and is dumped through any panel where the hopper and dumping switches may be located.

The 18 cubic foot Hopper is carried on the hopper sliding frame and can be placed at any panel point in the height of the mast where it is desired to discharge the concrete. The hopper gate is controlled by ropes from the ground or from the end of the chute line.



piece to be handled in erection weighs 80 pounds. The erectors set up the two side panels which, with six bolts and two $\frac{3}{4}$ " diagonal brace rods, complete the five-foot unit. No rigging is required. A working platform is laid on the top of the mast as erection progresses.

The maximum height of mast recommended is 90 feet. The height of mast required for any job will be the height of the forms plus 10-foot head-room plus

The Sliding Frame carries also the boom-chute bracket for support of a swivel-head chute under the hopper gate.

The 3' x 6' Platform Elevator rides on the outside face of the mast opposite the bucket and can be used at the same time the bucket is in operation. For independent mounting of platform elevator a bracket for the hoist line sheave is provided at top of mast. The steel frame for platform floor is furnished by owner.

INSLEY MAST HOIST PLANTS

Insley Half-Yard, Three-Quarter-Yard and One-Yard Mast Hoist Plants

This Mast is built in 20 ft. lengths, of latticed box section. The Standard Mast, 15" x 19" in cross section, is built for the Half-Yard Plant only and is limited to a 30-ft. Boom Chute and a height of 140 ft. unless tied to the building. The Heavy Mast, 20" x 22" in cross section, is built for all three sizes of buckets and can be carried to a height of 240 ft. if properly guyed. The Heavy Mast will support a boom with a 40-ft. trussed boom-chute plus a 40-ft. counterweight chute or 500 feet of continuous line chutes carried on an overhead cable.

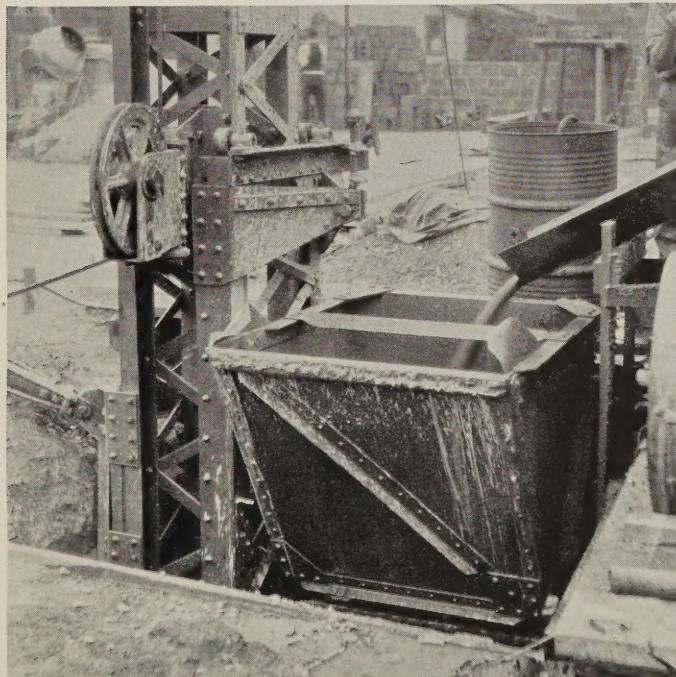
This mast is erected by means of a gin pole mounted on the bucket frame. The bucket with the gin pole and its load is drawn up the mast to the required height where the new section is set in place, bolted and guyed. The hoist line sheaves are moved up to the top of the new section and the erecting crew is lowered to the ground for the next section. The gin pole is furnished with the plant.

The height of mast required should allow 20 ft. for head room, plus two-fifths the reach of the chutes for slope where chutes are used.

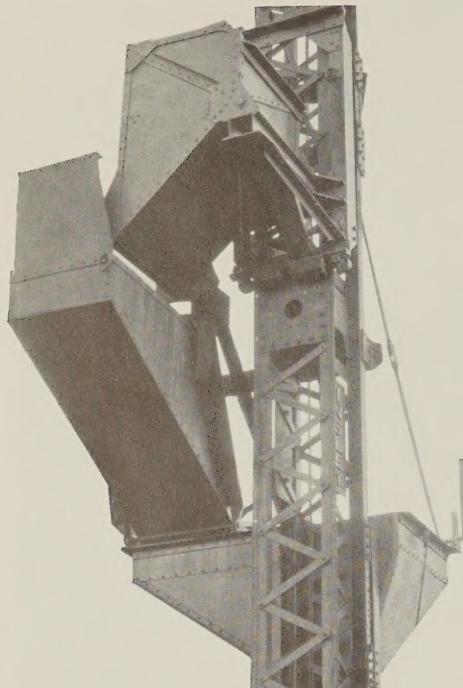
The Mast Hoist Bucket is built in three sizes for 14-S, 21-S or 28-S mixer. It is of the tip-over type carried on a frame with rollers running on the outstanding



legs of the mast corners. The bucket is dumped by a switch on the transfer chute which carries the concrete into the hopper which is mounted on a sliding frame on the opposite side of the mast. The bucket has an unlimited over-run and is automatically righted as it passes downward through the switch.



INSLEY MAST HOIST PLANTS



The Receiving Hopper, the dumping switch and chute bracket are carried on the *sliding frame*, which can be secured at any point in the height of the Mast.



A Platform Elevator can be mounted on the side of the Mast opposite the Bucket, or two Elevators may be mounted on opposite sides of the same Mast.

The standard platform is 8' wide x 6' deep, the floor for which is supplied by the owner. A platform on top of the bucket will answer for emergencies.



STANDARD MAST HOIST PLANTS

Item No.	Code	Plant	Net Wt. Lbs.	For Export	
				Gross Wt.	Cu. Ft. Crated
12 CU. FT. MAST HOIST PLANTS					
2012	HAKYV	12 Cu. Ft. Hoist Plant..... 60-ft. mast, sheaves, bucket, hopper.	3,850	5,250	195
2013	HALAD	12 Cu. Ft. BOOM-CHUTE PLANT..... 60-ft. mast, sheaves, bucket, hopper, 20-ft. boom-chute, 20-ft. swivel head chute.	5,000	6,650	280
2019	HALEC	PLATFORM ELEVATOR PLANT..... 60-ft. mast with platform elevator frame and sheaves.	3,720	5,115	165
2002	HALIB	PLATFORM ELEVATOR FRAME..... With sheaves for use with Items 2012 or 2013.	450	450	18
2001	HALOZ	5-ft. Extension Mast Section.....	210	210	9
HALF-YARD MAST HOIST PLANTS—STANDARD MAST					
3012	HARDO	HALF-YARD HOIST PLANT..... 60-ft. Standard Mast, sheaves, bucket, hopper, dumping switch and transfer chute, hopper sliding frame, erection gin pole.	8,500	9,900	580
3013	HAREH	HALF-YARD 30-FT. BOOM-CHUTE PLANT..... 60-ft. Standard Mast, sheaves, bucket, hopper, dumping switch and transfer chute, boom-chute sliding frame, 30-ft. boom-chute, erection gin pole.	9,380	11,000	680
3019	HASUF	SINGLE PLATFORM ELEVATOR PLANT..... 60-ft. Standard Mast, sheaves, platform elevator frame, erection gin pole.	5,720	7,100	450
3002	HARGE	PLATFORM ELEVATOR FRAME..... Top and bottom sheaves, top sheave beam, for use with any Standard Mast.	1,190	1,400	60
3001	HARFI	20-Ft. STANDARD MAST SECTION.....	1,290	1,290	90

INSLEY MAST HOIST PLANTS

STANDARD MAST HOIST PLANTS—Continued

Item No.	Code	Plant	Net Wt. Lbs.	For Export	
				Gross Wt.	Cu. Ft. Crated
HALF-YARD MAST HOIST PLANTS—HEAVY MAST					
3022	HARHA	HALF-YARD HOIST PLANT..... 60-ft. Heavy Mast, sheaves, bucket, hopper, dumping switch and transfer chute, hopper sliding frame and erection gin pole.	10,030	11,500	640
3023	HARIG	HALF-YARD 30-Ft. BOOM-CHUTE PLANT..... 60-ft. Heavy Mast, sheaves, bucket, hopper, dumping switch and transfer chute, boom-chute sliding frame, 30-ft. boom-chute, erection gin pole.	11,060	12,700	740
3024	HAROF	HALF-YARD 40-Ft. BOOM-CHUTE PLANT..... 60-ft. Heavy Mast, sheaves, bucket, hopper, dumping switch and transfer chute, boom-chute sliding frame, 40-ft. trussed boom-chute, erection gin pole.	11,360	13,100	780
3025	HARUD	HALF-YARD 40-Ft. BOOM AND COUNTERWEIGHT CHUTE PLANT..... 60-ft. Heavy Mast, sheaves, bucket, hopper, dumping switch and transfer chute, boom-chute sliding frame, 40-ft. boom, 40-ft. trussed boom-chute, 40-ft. counterweight chute, erection gin pole.	14,150	16,900	980
3032	HARYC	THREE-QUARTER-YARD HOIST PLANT..... 60-ft. Heavy Mast, sheaves, bucket, hopper, dumping switch and transfer chute, hopper sliding frame, erection gin pole.	10,750	12,400	730
3033	HASAK	THREE-QUARTER-YARD 30-Ft. BOOM-CHUTE PLANT..... 60-ft. Heavy Mast, sheaves, bucket, hopper, dumping switch and transfer chute, boom-chute sliding frame, 30-ft. boom-chute, erection gin pole.	11,770	13,700	830
3034	HASCY	THREE-QUARTER-YARD 40-Ft. BOOM-CHUTE PLANT..... 60-ft. Heavy Mast, sheaves, bucket, hopper, dumping switch and transfer chute, boom-chute sliding frame, 40-ft. trussed boom-chute, erection gin pole.	12,070	14,000	870
3035	HASDU	THREE-QUARTER-YARD 40-Ft. BOOM AND COUNTERWEIGHT CHUTE PLANT..... 60-ft. Heavy Mast, sheaves, bucket, hopper, dumping switch and transfer chute, boom plant sliding frame, 40-ft. boom, 40-ft. trussed boom-chute, 40-ft. counterweight chute, erection gin pole.	14,860	17,800	1,070
ONE-YARD MAST HOIST PLANTS—HEAVY MAST					
3042	HASEJ	ONE-YARD HOIST PLANT..... 60-ft. Heavy Mast, sheaves, bucket, hopper, dumping switch and transfer chute, hopper sliding frame, erection gin pole.	11,210	13,000	820
3043	HASFO	ONE-YARD 30-Ft. BOOM-CHUTE PLANT..... 60-ft. Heavy Mast, sheaves, bucket, hopper, dumping switch and transfer chute, boom-chute sliding frame, 30-ft. boom-chute, erection gin pole.	12,230	14,200	915
3044	HASGI	ONE-YARD 40-Ft. BOOM-CHUTE PLANT..... 60-ft. Heavy Mast, sheaves, bucket, hopper, dumping switch and transfer chute, boom-chute sliding frame, 40-ft. trussed boom-chute, erection gin pole.	12,540	14,600	960
3045	HASHE	ONE-YARD 40-Ft. BOOM AND COUNTERWEIGHT CHUTE PLANT..... 60-ft. Heavy Mast, sheaves, bucket, hopper, dumping switch and transfer chute, boom plant sliding frame, 40-ft. boom, 40-ft. trussed boom-chute, 40-ft. counterweight chute, erection gin pole.	15,320	18,400	1,160
3029	HASYD	SINGLE PLATFÖRM ELEVATOR PLANT—HEAVY MAST..... 60-ft. Mast, sheaves, platform elevator frame, erection gin pole.	7,530	9,000	500
3004	HASOG	PLATFORM ELEVATOR FRAME..... Top and bottom sheaves, top sheave beam, for use on any Heavy Mast.	1,420	1,600	65
3003	HASJA	20-Ft. HEAVY MAST SECTION.....	1,780	1,780	110

HOISTING POWER REQUIRED

Line Pull of Engine
on Single Line

12 Cu. Ft. Mast Hoist Plant.....	2,500 lbs.
Half-Yard Mast Hoist Plant.....	4,000 lbs.
Three-Quarter-Yard Hoist Plant.....	5,500 lbs.
One-Yard Mast Hoist Plant.....	7,000 lbs.

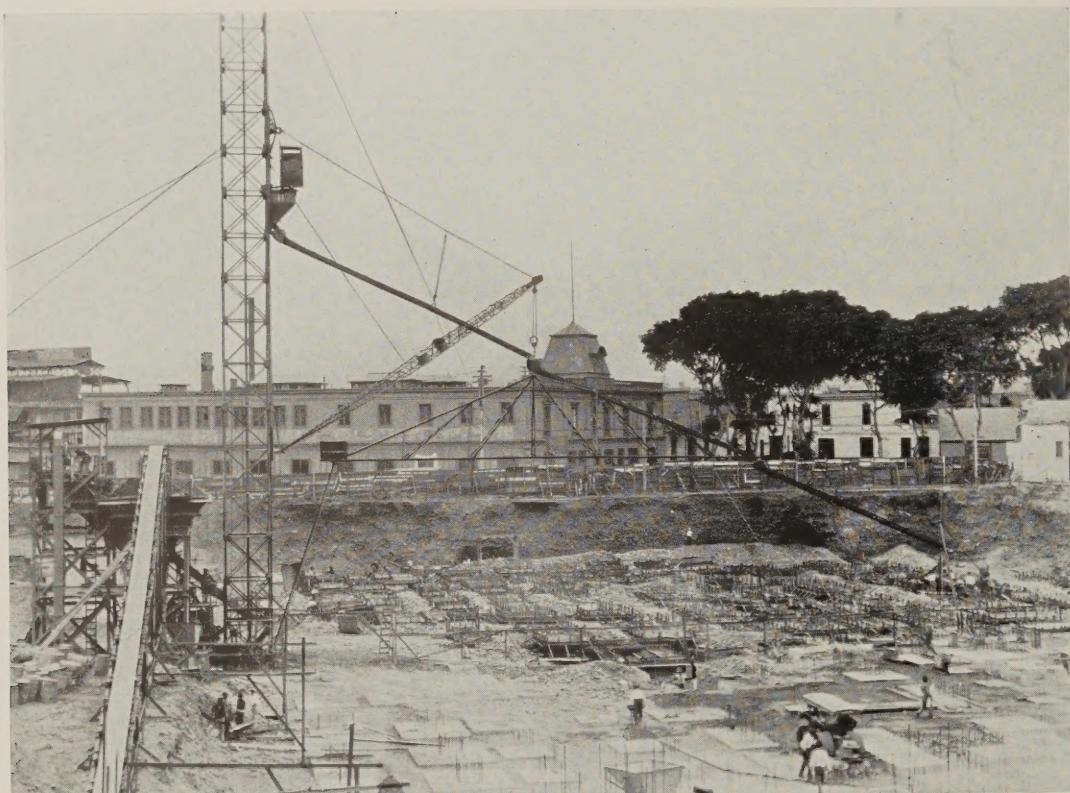
INSLEY STEEL TOWER QUICK-SHIFT

This plant combines the most economical and dependable method of distribution of concrete which is known to the industry, especially adaptable to structures of considerable concentrated yardage.

The Steel Tower Plant is offered as a standard item in connection with the 36 cu. ft. Quick-Shift Bucket only. Steel Towers for other sizes and types of bucket are available, however, on special inquiry. These towers are built of standard structural steel sections, fabricated with precision, so that erection labor is reduced to a minimum. The corners are adequately reinforced to resist the heavy twisting strains imposed by the swing-

ing boom. Tower sections are in 20 ft. lengths and shipped knocked down. The Standard Tower can be carried to a height of 240 ft. Special towers, however, can be built to a height of 500 ft. or more.

The Standard Quick-Shift Steel Tower Plant carries a 50-ft. boom and chute with a 50-ft. Standard Counterweight Chute, providing a 100-ft. radius of distribution. The tower is designed, however, to carry a 50-ft. Heavy Counterweight Chute, with the counterweighted end tied down to support a 30-ft. Swivel Head Chute, providing 130-ft. radius of distribution unsupported from the floor.



STANDARD 36 CU. FT. QUICK-SHIFT STEEL TOWER PLANT

Item No.	Code	Item	Net Wt. Lbs.	For Export	
				Gross Wt.	Cu. Ft. Crated
3440	TAKHY	60-ft. steel tower.....	10,800	12,600	230
336	HACOP	36 cu. ft. quick-shift bucket.....	1,130	1,530	158
2954	BABOV	54 cu. ft. tower hopper.....	850	1,080	144
3907	TOCGO	Boom plant sliding frame.....	2,600	3,200	60
3950	TODIK	50-ft. steel boom.....	1,450	2,750	230
4851	SABUC	50-ft. boom chute.....	1,030	1,400	92
3850	SADOG	50-ft. standard counterweight chute.....	2,735	3,905	359
3915	TOCEK	16-in. roller bearing top sheave set for bucket.....	120	160	3
3916	TOCFU	16-in. roller bearing bottom swivel sheave set for bucket.....	130	170	3
3901	TOCHI	12-in. upper shift line sheave.....	75	100	1
3902	TOCIJ	12-in. double-shift block (top of sliding frame).....	160	190	2
811	MADEN	12-in. lower shift line sheave.....	40	60	1
3408	TAJOK	20-ft. intermediate tower sections.....	2,750	2,850	30
3851	SAFEK	50-ft. heavy counterweight (tie-down) chute.....	3,990	5,520	483
4830	SABCO	30-ft. swivel head chute extension.....	690	940	64

CONCRETE GRAVITY PLANTS

ECONOMY AND QUALITY. These views of "Concrete Central," a battery of 69 grain bins built in 1917 by the Monarch Engineering Company, Buffalo, N. Y., are offered to illustrate both the *amazing economy in con-*

struction time and costs which can be realized by the use of the Insley Quick-Shift Concrete Gravity Plant and the *quality and permanence* of the finished structure.



June 12, 1917



Eighteen days later—June 30, 1917



Twenty years later—1937

MISCELLANEOUS STANDARD TOWER PLANT EQUIPMENT

ROLLER HOIST BUCKET

This is a particularly efficient installation for a wooden tower where the point of spill is at a fixed height. The bottom guides throw the bucket out past the face of the tower under the mixer chute and the top guides turn it over to discharge the concrete into the hopper. Top and bottom guide angles are furnished with the bucket. This bucket is offered in two sizes, 18 cu. ft. and 36 cu. ft. water level.

QUICK-SHIFT HOIST BUCKET

The advantage of this bucket, in connection with the Sliding Frame and Hopper on the face of the tower, is in the easy shifting of the point of spill for different positions on the tower. Otherwise it is the practical equivalent of the Roller Hoist Bucket and is made in two sizes, 18 cu. ft. and 36 cu. ft.

THE SLIDING FRAME which carries the Tower Hopper and the Quick-Shift Bucket dumping guides is mounted on slides at the front corners of the tower and is moved up and down the face of the tower by means of shift lines. It can be secured at any desired panel through which the bucket can be dumped after removing the diagonal bracing.

TOWER HOPPERS

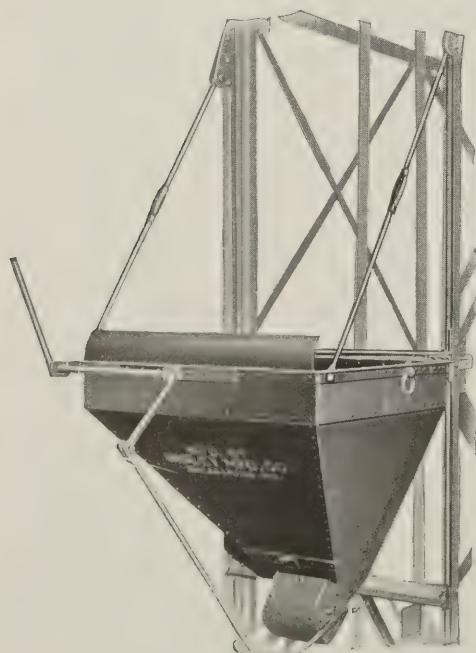
There are two types of standard Tower Hoppers, the *Extended Gate Hopper* used principally with the Roller Hoist Bucket, where the concrete is discharged from the hopper into carts or wheelbarrows, and the *Vertical Back Hopper* used principally with the Quick-Shift plant in connection with chutes where it is desirable to pivot the chute head and supporting boom plant as close to the tower as practicable. Tower Hoppers are offered in two sizes for use with the corresponding sizes of tower buckets. The gates on these hoppers have 8" x 12" discharge opening. 12" x 12" and 12" x 18" gates can be furnished on these hoppers for larger aggregates and stiffer concrete.



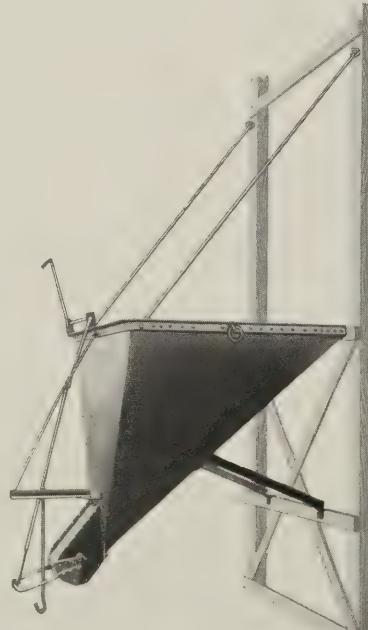
Roller Hoist Bucket



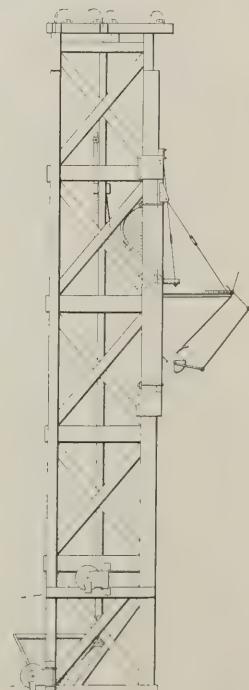
Quick-Shift Hoist Bucket



Vertical Back Hopper



Extended Gate Hopper



MISCELLANEOUS STANDARD TOWER PLANT EQUIPMENT



Portable Derrick Boom

TOWER SHEAVES

TOP TOWER SHEAVES are 16" cast iron carried in babbitted boxes.

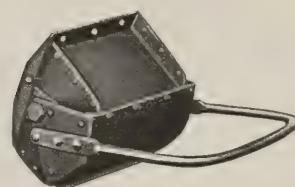
BOTTOM TOWER SHEAVES are 16" cast iron with hardened steel bushings mounted in a swivel bracket.

HOPPER AND BIN GATES

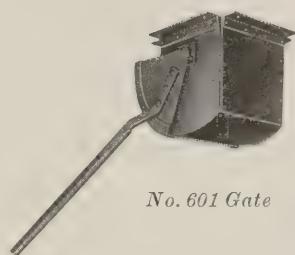
These gates are practically grout tight and are furnished in the sizes and types listed for convenient attachment to either steel or wooden hoppers for concrete or dry materials.

PORTABLE DERRICK BOOM

This is a structural steel boom, 20 ft. long, provided with 6" x 6" post clamps for attachment to the leg of any wood or steel tower as an auxiliary boom in lifting form lumber, reinforcing steel or other materials. The top and bottom swivel brackets are provided with 3/8" wire rope sheaves for the boom and load lines which are carried down through the hollow pin of the lower bracket.



No. 701 gate



No. 601 Gate

MISCELLANEOUS STANDARD TOWER PLANT EQUIPMENT

Item No.	Code	Item	Net Wt. Lbs.	For Export	
				Gross Wt.	Cu. Ft. Crated
FOR 1/2 CU. YD. ROLLER HOIST WOOD TOWER PLANT					
118	HACUN	18 cu. ft. roller hoist bucket.....	710	960	63
730	BACAB	30 cu. ft. extended gate tower hopper.....	590	740	115
816	MABEL	16-in. top sheave set—babbitted boxes—for bucket.....	120	160	3
807	MACOK	16-in. bottom sheave set—hardened steel bushed—for bucket.....	130	150	2
FOR 1 CU. YD. ROLLER HOIST WOOD TOWER PLANT					
136	HADIS	36 cu. ft. roller hoist bucket.....	1,020	1,320	109
760	BACIX	60 cu. ft. extended gate tower hopper.....	900	1,100	220
816	MABEL	16-in. top sheave set—babbitted boxes—for bucket.....	120	160	3
807	MACOK	16-in. bottom sheave set—hardened steel bushed—for bucket.....	130	150	2
FOR 1/2 CU. YD. QUICK-SHIFT WOOD TOWER PLANT					
318	HACIR	18 cu. ft. quick-shift hoist bucket.....	850	1,190	100
2927	BABAZ	27 cu. ft. vertical back tower hopper.....	530	700	103
816	MABEL	16-in. top sheave set—babbitted boxes—for bucket.....	120	160	3
807	MACOK	16-in. bottom sheave set—hardened steel bushed—for bucket.....	130	150	2
2902-18	BIBUW	Hopper sliding frame for wood tower.....	830	950	18
FOR 1 CU. YD. QUICK-SHIFT WOOD TOWER PLANT					
336	HACOP	36 cu. ft. quick-shift hoist bucket.....	1,130	1,530	158
2954	BABOV	54 cu. ft. vertical back tower hopper.....	850	1,080	144
816	MABEL	16-in. top sheave set—babbitted boxes—for bucket.....	120	160	3
807	MACOK	16-in. bottom sheave set—hardened steel bushed—for bucket.....	130	150	2
2902-36	BIBWO	Hopper sliding frame for wood tower.....	830	950	13
MISCELLANEOUS EQUIPMENT					
101	CACOV	20-ft. portable derrick boom for wood or steel tower.....	470	780	38
601	BEDIV	12" x 12" hopper gate for bottom discharge bin	130	190	5
701	BEBEZ	8" x 12" hopper gate for 6" to 12" hopper front.....	50	80	3
705	BECAC	12" x 18" hopper gate for 6" to 12" hopper front.....	140	210	8
707	BECIZ	8" x 12" hopper gate for 12" to 12" hopper front.....	60	90	4
709	BEDAD	8" x 12" hopper gate for vertical hopper front	80	120	6

THE INSLEY PAVER TOWER

The combination of an Insley Steel Tower mounted on a standard paver offers a self-contained mixing and distributing unit of easy portability and of great economy. It is especially adaptable for work of considerable length but of limited height, such as foundations, retaining walls, overhead crossings, sewage disposal plants, etc.

This tower is built of structural steel, of open back cross section, with a bracing frame extending across the back of the tower to give it proper support.

The standard paver tower carries a 34 cubic feet (water level) bucket to take the batch from a 27-E paver.

The height of the tower can be varied between 44 feet and 70' 8", with a deduction for the height of point of spill of 12 feet for head room plus two-fifths the chute length for slope of chutes. The usual chute equipment is a 20-foot boom-chute carrying a 10-foot swivel-head chute extension, providing an effective 30-foot distributing radius.

As this tower plant is intimately connected in with the paver unit and its controls, it can be offered only as a complete unit installation including the paver. The Standard Insley Paver Tower is designed for mounting on either a Smith or a Koehring 27-E Paver and therefore will be available through the Koehring Co. or T. L. Smith Co.



Two Paver Towers on foundation work at Inland Steel Co., Indiana Harbour

SPECIAL CONCRETE GRAVITY PLANT INSTALLATIONS

Insley Engineers, with their many years of experience in the field of concrete distribution, offer their services to consulting engineers and contractors without obligation in connection with any special plant problems which may be presented.



*The Steel Tower
Plant carried
to a height of
500 feet*



*The Gantry
Plant with
Derrick and
Mixer Unit*

*The Barge
Plant for
bridge piers
are typical
installations*



INSLEY CONCRETE CHUTES

The effective use of chutes in handling concrete depends primarily upon the quality of the concrete. Dry concrete with a slump as low as 2 in. can be placed with chutes and at great economy if care is taken to maintain uniform consistency and an even flow in the chute line. A slope of 1 to 3 is the usual installation for reasonably plastic concrete, but it may be necessary to increase this slope to as much as 1 to 2 for the drier mixes.

In starting the job and in closing down the operator should run through the chutes two or three buckets of water. The chute line must be kept clean.



Standard chute sections are 14 in. across the top and 9½ in. in depth and are rolled from No. 14 gauge blue annealed steel sheets with proper reinforcing angles and cross arch bars. They are also provided with replaceable 12" x No. 14 gauge liners. The Standard Counterweight Chutes are balanced when empty and require end support for the concrete load only. The Heavy Counterweight Chutes can be tied down to carry an additional 30-ft. Swivel Head Chute without floor support.

The flexible drop assemblies from the lower end of a chute line can be moved around more or less like an elephant's trunk and are frequently very serviceable for extending down into forms or in reaching out-of-way spots.



2727 Hopper Head
with 2721 Vertical Drop



STANDARD INSLEY CONCRETE CHUTE SECTIONS

Item No.	Code	Item	Length	Net Wt. Lbs.	For Export	
					Gross Wt.	Cu. Ft. Crated
4810	SABAH	14-in. swivel head chute.....	10' 0"	330	420	28
4820	SABBU	14-in. swivel head chute.....	20' 0"	500	680	48
4830	SABCO	14-in. swivel head chute.....	30' 0"	690	940	64
4840	SABEG	14-in. swivel head chute, trussed.....	40' 0"	1,120	1,430	74
4850	SABIF	14-in. swivel head chute, trussed.....	50' 0"	1,415	1,755	72
4809	SACDO	14-in. continuous line chute.....	10' 0"	175	235	15
4819	SACEH	14-in. continuous line chute.....	20' 0"	340	470	35
4829	SACHA	14-in. continuous line chute.....	30' 0"	535	725	53
4808	SACIG	14-in. combination swivel head chute.....	10' 0"	265	345	28
4818	SACOF	14-in. combination swivel head chute.....	20' 0"	435	605	48
4828	SACUD	14-in. combination swivel head chute.....	30' 0"	630	870	64
4807	SADAK	14-in. combination swivel plate chute.....	10' 0"	240	310	24
4817	SADEJ	14-in. combination swivel plate chute.....	20' 0"	405	535	45
4827	SADFO	14-in. combination swivel plate chute.....	30' 0"	600	800	61
3830	SADHE	Standard counterweight chute.....	30' 0"	1,190	1,700	149
3840	SADIH	Standard counterweight chute.....	40' 0"	1,605	2,345	216
3850	SADOG	Standard counterweight chute.....	50' 0"	2,735	3,905	359
3831	SADUF	Heavy counterweight chute.....	30' 0"	2,185	3,135	301
3851	SAFEK	Heavy counterweight chute.....	50' 0"	3,990	5,520	483
	SAKEP	12" x No. 14 gauge liners.....	per ft.	3 1/4		
	SAKIN	12" x No. 12 gauge liners.....	per ft.	4 1/2		
	SAKJY	8" x No. 12 gauge interliners.....	per ft.	3		
2727	SAGKE	10-in. line hopper.....	2' 6"	70	190	27
2721	SAHAN	10-in. flexible drop assembly, seven joints.....	12' 6"	180	250	16
2722	SAHEM	10-in. flexible drop joints, net 1' 9"	2' 0"	26	36	3
2735	SAHIL	10-in. flexible drop joints, net 4' 9"	5' 0"	60	80	6
2726	SAHOK	10-in. flexible drop joints, net 9' 9"	10' 0"	110	140	12
2725	SAJAP	10-in. flexible bottom joint with handles 4' 9"	5' 0"	50	70	6
2723	SAJEN	10-in. flexible baffle section, 3' 9"	4' 0"	90	110	6

FLOOR HOPPERS AND ROCKER DUMP CARTS

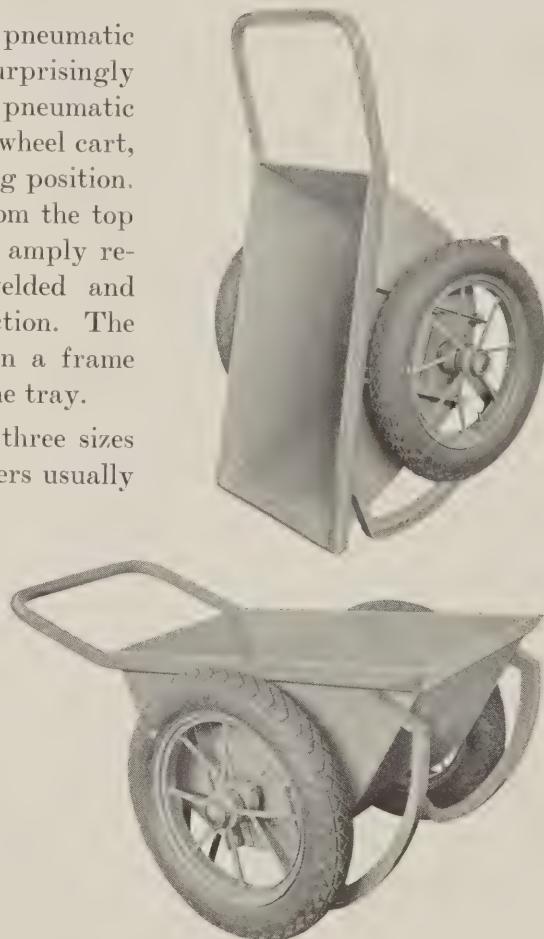
THE STANDARD INSLEY FLOOR HOPPERS have the same efficient gate-operating mechanism used on Insley Round-Type Buckets. This gives the operator absolute and easy control of the flow of concrete at all times. The gate-operating bail has an extension to each side of the hopper within easy reach of the cart pusher from whichever side he brings the cart.

The 2 cu. yd. Hopper, No. 861, is built up by the addition of a 21½-inch top section to Hopper No. 831.

THE ROCKER DUMP HAND CART is equipped with pneumatic tires and roller bearing wheels, is well balanced and surprisingly easy to push. The dumping rockers provide for this pneumatic tired cart the clean dumping feature of the 42-inch steel wheel cart, with the added security against rolling while in a dumping position. The rockers make it possible to dump the cart easily from the top of a ramp. The tray is amply reinforced, completely welded and entirely free of obstruction. The stub axles are carried in a frame welded integrally with the tray.

This cart is made in three sizes to suit the range of mixers usually found on the construction job.

The 6 cu. ft. cart, using the same tray but without the rockers, equipped with 42-inch steel wheels with roller bearings, is also offered for use where the steel wheel is preferred.



STANDARD FLOOR HOPPERS

Item No.	Code	Rated Capacity	Actual Capacity	Inside Dimension Top	Height to Top	Gate Opening	Clearance Under Gate	Net Wt. Lbs.	For Export	
									Gross Wt. Lbs.	Cu. Ft. Crated
831	BAD'TY	1 cu. yd.	31 cu. ft.	60" diam.	82"	12"x20"	31.5"	800	1,200	206
861	BADUW	2 cu. yd.	61 cu. ft.	60" diam.	103½"	12"x20"	31.5"	980	1,400	258

STANDARD ROCKER DUMP HAND CARTS—PNEUMATIC TIRES

Item No.	Code	Rated Capacity	Actual Capacity	Inside Dimension Top	Height to Top	Overall Dimension:	Tires	Net Wt. Lbs.	For Export			
									Crated		Not Crated	
									Gross Wt. Lbs.	Cu. Ft.	Gross Wt. Lbs.	Cu. Ft.
156	CABRU	6 cu. ft.	7.0 cu. ft.	21"x39"	27.0"	38"x57"	4"-26"	235	350	22	250	14
157	CACRY	9 cu. ft.	9.4 cu. ft.	28"x39"	27.0"	45"x57"	4½"-27"	255	425	27	270	18
159	CABVE	12 cu. ft.	11.8 cu. ft.	28"x45"	28.0"	46"x65"	6"-29"	325	450	36	340	23

STANDARD HAND CART—STEEL WHEELS

158A	CACSU	6 cu. ft.	7.0 cu. ft.	21"x39"	28.0"	38"x57"	3"-42"	270	385	29	300	20
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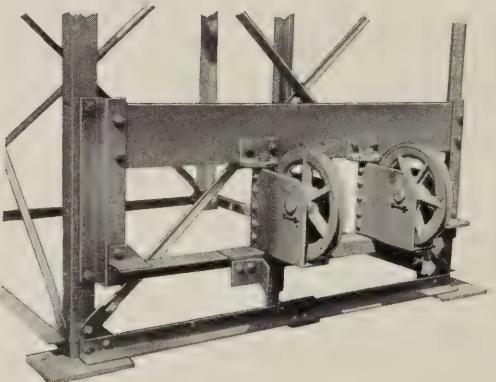
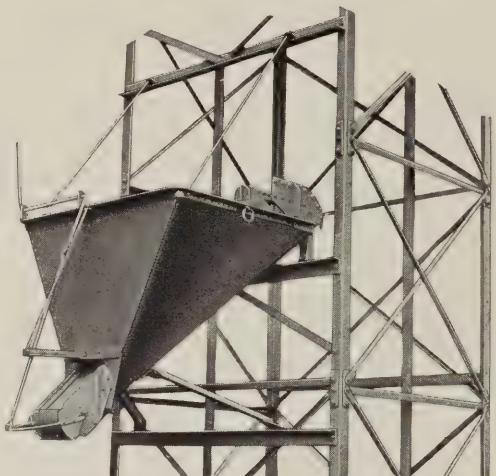
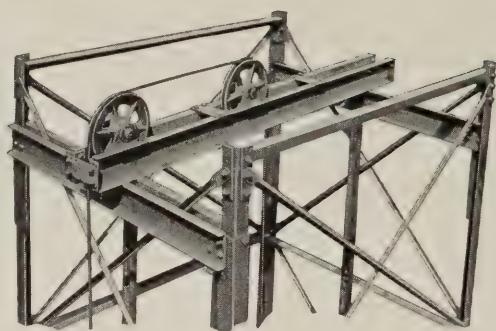
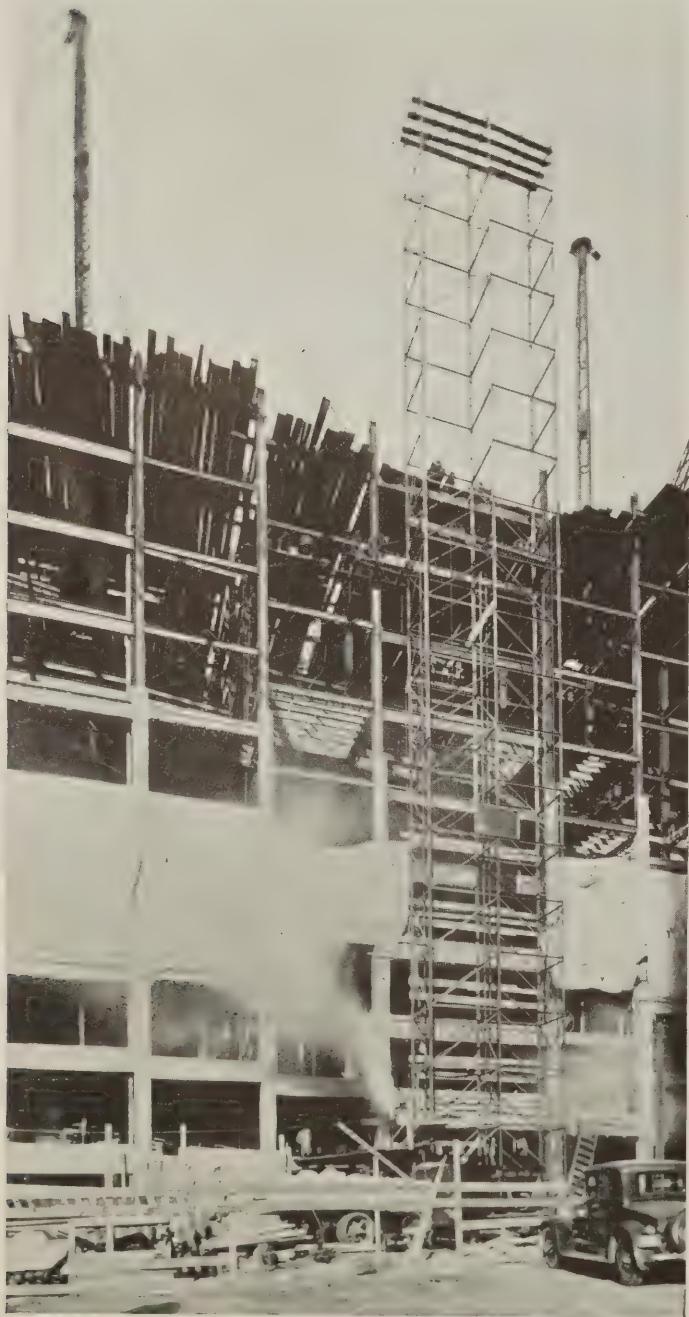
NOTE—Export gross weight and volume for carts based on two carts crated or packed together.

INSLEY STEEL BUILDERS TOWER

This is an enclosed cage tower, built of structural steel members with a platform elevator for wheelbarrows and building materials, with provision on the platform for mounting a tip-over concrete bucket.

The Standard Tower can be carried to a height of 300 ft. For towers higher than 300 ft. *Heavy Sections* are available for the lower panels, by the use of which towers as high as 600 ft. can be erected.

Tower Sections are 6'-8", designed particularly for ease of erection and shipped knocked-down. No



single piece, with the exception of the top sheave beam, weighs over 70 pounds. Each panel point, including the post splice, together with the horizontal and diagonal members, is assembled with but four bolts. Three men can erect and bolt up a forty-foot single compartment tower in from one and one-half to two hours.

These towers are offered in two sizes, for *Two Wheelbarrow Platform Elevator*, which is 6' x 6', and for *Three-Wheelbar-*

INSLEY STEEL BUILDERS TOWER

row Platform Elevator, which is 6' x 7½', and each size is offered as a single or a double compartment assembly. The second shaft for the double compartment tower can be added to the single tower at any time.

The Platform Elevator is furnished with a wooden floor laid in three sections. The front and rear sections are removable, leaving the center section upon which the Concrete Bucket may be mounted.

A Tip-Over Bucket with Extended-Gate Tower Hopper in either half-yard or one-yard capacity is supplied for handling concrete. The Tower Hopper which carries the dumping switch can be mounted at a convenient height on the face of the tower for distributing concrete on upper floors with carts or chutes. The dumping switch can be thrown out of the path of the bucket so that two or more hoppers at different elevations can be in service on the same job. The

hopper used is the regular Extended-Gate Tower Hopper.

A Landing Panel is furnished to provide a support for the outer end of the landing stage with which the contractor bridges across from the building to the tower.



INSLEY BUILDERS TOWERS

Item No.	Code	Item	Net Wt. Lbs.	For Export	
				Gross Wt.	Cu. Ft. Crated
1041	CYCO'C	SINGLE COMPARTMENT TOWER FOR TWO WHEELBARROWS..... 40-ft. tower (six standard tower sections), base unit, top beams and sheaves, 6'x 6' elevator, one landing panel.	6,635	6,710	151
1071	CYCXY	Intermediate sections, 6'-8", standard.....	622	625	7
1081	CYDIF	Intermediate sections, 6' 8", heavy.....	665	668	7
1044	CYCUB	SINGLE COMPARTMENT TOWER FOR THREE WHEELBARROWS..... 40-ft. tower (six standard tower sections), base unit, top beams and sheaves, 6' x 7½' elevator, one landing panel.	7,100	7,175	161
1074	CYDAH	Intermediate sections, 6'-8", standard.....	644	647	7.5
1084	CYDYB	Intermediate sections, 6'-8", heavy.....	685	688	7.5
1042	CYCID	DOUBLE COMPARTMENT TOWER FOR TWO WHEELBARROWS EACH SIDE..... 40-ft. tower (six standard tower sections), base unit, top beams and sheaves, two 6' x 6' elevators, two landing panels.	11,000	11,140	245
1072	CYCYZ	Intermediate sections, 6'-8", standard.....	974	980	10
1082	CYDOD	Intermediate sections, 6'-8", heavy.....	1,040	1,045	10
1045	CYCFA	DOUBLE COMPARTMENT TOWER FOR THREE WHEELBARROWS EACH SIDE..... 40-ft. tower (six standard tower sections), base unit, top beams and sheaves, two 6' x 7½' elevators, two landing panels.	11,700	11,840	265
1075	CYDBU	Intermediate sections, 6'-8", standard.....	1,005	1,010	10.5
1085	CYDZY	Intermediate sections, 6'-8", heavy.....	1,070	1,075	10.5
1051	CYFGE	Additional landing panel for two-wheelbarrow tower.....	120	120	1.5
1052	CYFHA	Additional landing panel for three-wheelbarrow tower..... NOTE—Heavy intermediate sections will be required at the base for towers which are over 300 ft. in height.	140	140	2
1092	CYFOF	HALF-YARD BUCKET COMBINATION..... Includes 18 cu. ft. bucket, 30 cu. ft. extended gate hopper and dumping switch set.	1,800	2,050	156
1094	CYFYC	ONE-YARD BUCKET COMBINATION..... Includes 36 cu. ft. bucket, 60 cu. ft. extended gate hopper and dumping switch set.	2,400	2,700	287

CONTROLLABLE CENTER-DUMP BUCKETS

THE INSLEY CONTROLLABLE CENTER DUMP FORM BUCKET was the pioneer bucket of the controllable center dump class, first offered to the trade over thirty years ago. *The Insley Round Type Bucket* represents in its design these many years' experience of Insley engineers as designers and manufacturers of thousands of buckets of various types. By connecting the gate operating linkage at the middle of the gate, half the usual gate-end linkage is eliminated and also the control lever is placed at the *end* of the gate instead of at the side. Therefore the operator can stand on the forms instead of requiring a platform to be built at one side. The design of this linkage not only gives the operator easy and sensitive control of the gate in all positions of opening but it provides a grout tight closure with a strong knuckle-joint clamping together of the two halves. The gate and linkage are fully protected at all times within the round shell upon which the bucket stands. There are no corners to interfere with a clean discharge of the stiffest concrete.

This bucket is made with a long, narrow gate for form work and with a square gate for more easily discharging mass concrete as in foundation placement. Standard sizes are $\frac{1}{2}$ cu. yd. to 4 cu. yd. capacity.



*Round Type
Foundation
Bucket with
Square Gate*



*Round Type
Form
Bucket with
Long and
Narrow Gate*



CONTROLLABLE CENTER-DUMP BUCKETS

Five Outstanding Features of the Insley Round Type Bucket

1. CENTER DUMP

The gates open and close directly in the bottom of the bucket. The concrete goes straight down and into the forms with a minimum of spillage.

2. CONTROLLABLE AT ANY STAGE OF DISCHARGE

One hand on the operating lever will easily control the bucket at any stage of discharge.

3. GROUT TIGHT

When the gates of the Insley Round Type Bucket first come together the operating lever is still 10 inches from its keeper. When the lever is pushed into the keeper it puts a toggle-joint spring pressure on the gates which makes them grout tight.

4. OPERATING LEVER AT END OF GATE

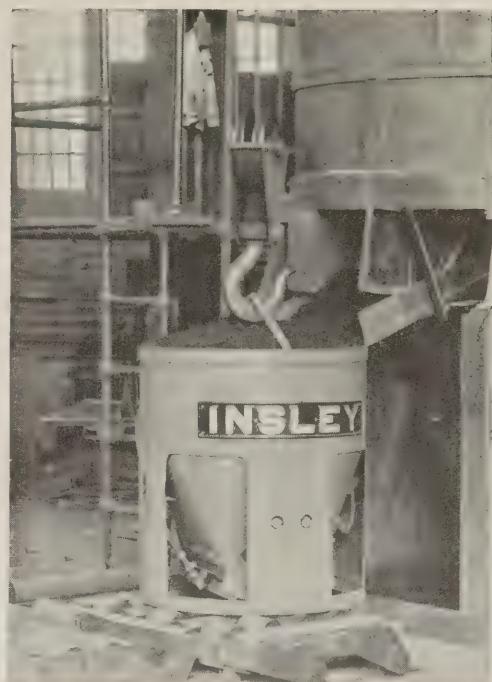
The operating lever of the Insley Bucket is placed at the end of the gate so that it is possible for the operator to stand on the forms while pouring concrete.

5. NO MAINTENANCE

There are no parts on the Insley Bucket that require frequent renewal.

Insley Round Type Buckets for Industrial Uses

Because of the convenience of the bottom shell support, the tightly clamped gate and the ease of operation, the Insley Controllable Center Dump Bucket has a wide field of usefulness in the foundry and for other industrial purposes where various materials are to be transported and distributed.



STANDARD CONTROLLABLE CENTER DUMP BUCKETS

Item No.	Code	Rated Capacity	Actual Capacity	Inside Dimension Top	Height to Top	Gate Opening	Net Wt. Lbs.	For Export	
								Gross Wt. Lbs.	Cu. Ft. Crated
STANDARD ROUND TYPE FORM BUCKETS									
670	FADAX	1/2 cu. yd.	15.0 cu. ft.	34" diam.	39.5"	12"x19"	420	420	37
671	FADIV	3/4 cu. yd.	22.5 cu. ft.	40" diam.	45.0"	12"x22"	520	520	58
672	FADPY	1 cu. yd.	35.5 cu. ft.	48" diam.	51.5"	12"x26"	820	820	94
673	FADSO	1 1/2 cu. yd.	47.0 cu. ft.	54" diam.	56.0"	12"x28"	1,080	1,030	130
674	FADUS	2 cu. yd.	62.5 cu. ft.	60" diam.	60.0"	14"x32"	1,500	1,500	173
STANDARD ROUND TYPE FOUNDATION BUCKETS									
682	FADRU	1 cu. yd.	35.0 cu. ft.	48" diam.	51.5"	16"x20"	820	820	94
683	FADTI	1 1/2 cu. yd.	47.5 cu. ft.	54" diam.	56.0"	18"x21 1/2"	1,080	1,030	130
684	FADVE	2 cu. yd.	62.0 cu. ft.	60" diam.	60.0"	20"x24"	1,500	1,500	173
686	FADYR	3 cu. yd.	92.5 cu. ft.	66" diam.	70.0"	22"x26"	2,400	2,400	234
688	FADWA	4 cu. yd.	123.5 cu. ft.	74" diam.	76.0"	26"x32 1/2"	3,100	3,100	313

Insley Products

CRAWLER MOUNTED AND TRUCK MOUNTED
EXCAVATORS AND CRANES

$\frac{3}{8}$ CU. YD. AND $\frac{1}{2}$ CU. YD. CAPACITY

SHOVELS, TRENCH HOES, DRAGLINE AND CLAMSHELL CRANES

•

SEMI-TRAILER BOTTOM DUMP DIRT WAGONS

•

SHOULDER FINISHER MACHINES

•

CONCRETE PLACING EQUIPMENT

•

BUCKETS, HAND CARTS

•

CARS AND SKIPS

•

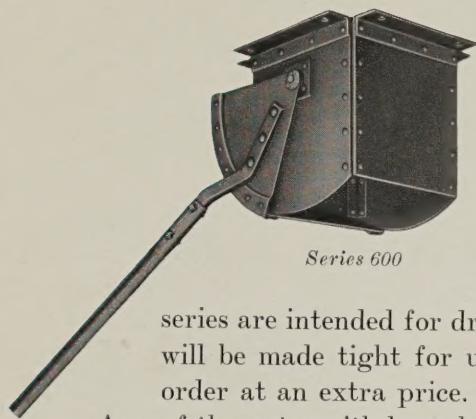
DERRICKS

*Insley Products are protected by
Patents and Patents-Pending*





HOPPER GATES AND MATERIAL BIN GATES



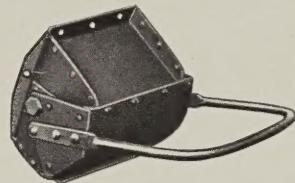
Series 600

Standard Side Discharge Gates as covered by the 700 series are practically grout tight and are the gates that are furnished with all types of standard hoppers. These gates are also suited for use on material bins where a side discharge is satisfactory.

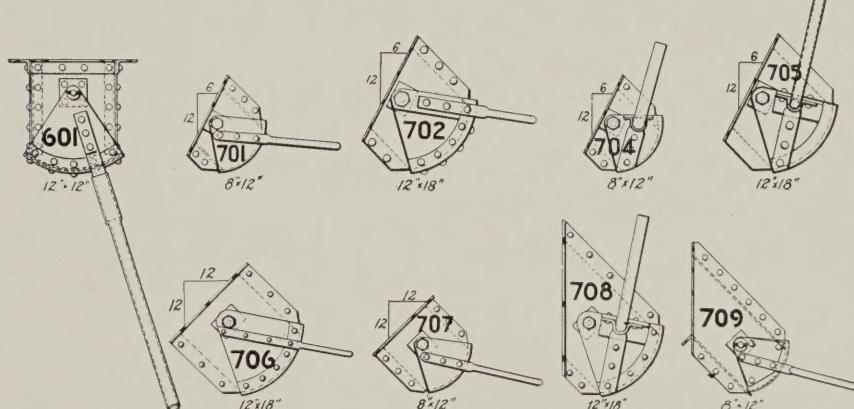
Standard Bottom Discharge Gates of the 600

series are intended for dry material bin use only, but will be made tight for use with concrete on special order at an extra price.

Any of the gates with lever handle will be furnished with stub for pipe lever upon request.



Series 700

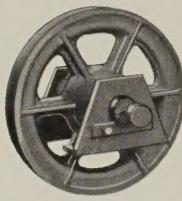


HOPPER GATES AND MATERIAL BIN GATES

Item No.	Code	Size	For Hopper or Bin Face	Style of Handle	Net Weight Lbs.	FOR EXPORT	
						Gross Weight Lbs.	Cu. Ft. Crated
701	BEBEZ	8" x 12"	6" to 12"	Bail	50	80	3
702	BEBIX	12" x 18"	6" to 12"	Bail	110	160	7
704	BELOW	8" x 12"	6" to 12"	Lever	60	110	5
705	BECAC	12" x 18"	6" to 12"	Lever	140	210	8
706	BECEB	12" x 18"	12" to 12"	Bail	120	160	7
707	BECIZ	8" x 12"	12" to 12"	Bail	60	90	4
708	BECOX	12" x 18"	Vertical	Lever	150	240	11
709	BEDAD	8" x 12"	Vertical	Bail	80	120	6
BEDEC—Substitute pipe Stubs for lever handle							
601	BEDIV	12" x 12"	Horizontal	Lever	130	190	5
602	BEDOZ	16" x 16"	Horizontal	Lever	210	280	8
603	BEDUX	20" x 20"	Horizontal	Lever	290	380	13



TOWER SHEAVE SETS

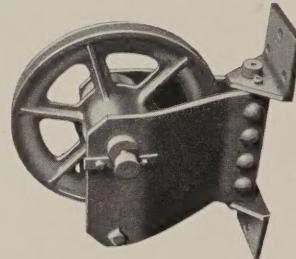


The Top Sheave Set for the standard tower for No. 336 bucket is covered by Item No. 3915, and consists of a pair of cast steel 16-inch sheaves equipped with roller bearings turning on a case-hardened pin keyed to the sheave top frame. The Bottom Sheave Set for the same tower is covered by Item No. 3916 and

includes the same sheave with roller bearings, turning on a pin keyed to side plates of a swivel block.

For shifting the sliding frame of a standard tower plant Item No. 3901, a set of three 12-inch sheaves is located at the top of the tower, Item No. 3902 a double 12-inch block is located at the top of the sliding frame, and Item No. 811, a 12-inch swivel block at the bottom of the tower.

Other sheaves of 12 and 16-inch diameter with plain bearings or metaline bushings are provided for use with wood towers. Sixteen-inch sheaves are always required for the bucket line, the 12-inch sheaves being furnished for shift lines used to shift the sliding frame.



TOWER SHEAVE SETS

For 36 Cubic Foot Quick Shift Steel Tower Plant

Item No.	Code	Diameter of Sheave	Diameter Shaft	Maximum Wire Rope	Net Weight Lbs.	FOR EXPORT	
						Gross Weight Lbs.	Cu. Ft. Crated
3915	TOCEK	16"	2 $\frac{3}{16}$ "	7/8"	120	160	3
3916	TOCFU	16"	2 $\frac{3}{16}$ "	7/8"	130	170	3

Above sheaves are cast steel and equipped with Hyatt Roller Bearings. Item No. 3915 is top sheave set. Item No. 3916 is bottom swivel sheave.

Item No.	Code	Diameter of Sheaves	Diameter Shaft	Maximum Wire Rope	Net Weight Lbs.	FOR EXPORT	
						Gross Weight Lbs.	Cu. Ft. Crated
3901	TOCHI	12"	1 $\frac{1}{2}$ "	3/4"	75	100	1
3902	TOCIJ	12"	1 $\frac{1}{2}$ "	3/4"	160	190	2

No. 3901 is upper shift line sheave set. No. 3902 is double sheave shift block. Use No. 811 shift line sheave at base.





